8012664296





Barrick Resources (USA), Inc. Barrick Mercur Gold Mine P.O. Box 838 Tooele, Utah 84074

Tel: (801) 268-4447 . Fax: (801) 266-4296

To: //am Helberg From: Hem Cerrick Date: 15-27-98 Fax Number: Subject: Her your request of **A TWO final letter on Colobn Lake Sed. basin **A F 3 final construction permit approval

Problems or questions, please notify us at (801) 268-4447, extension

Water Quality Board

Lynn F. Pett

Lerdy H. Wullstein, Ph.D.



Michael O. Leavitt Covernor Dianne R. Nielson, Ph.D. Executive Director Don A. Ostler, P.E. Director

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

288 North 1460 West P.O. Box 144870 Satt Lake City, Utah 84114-4870 (801) 538-6146 Voice (801) 538-6016 Fax (801) 536-4414 T.D.D. Deqinfo@deq.state.ut.us E-Mail www.deg.state.ut.us Web

March 3, 1998

Glenn M. Eurick, Director Environmental Relations US Barrick Resources (USA) Inc. P.O. Box 838 Tooele, Utah 84074-0838

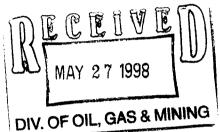
Dear Mr. Eurick:

Re: Jan. 19, 1998 Barrick Letter on Golden Gate Basin

compliance with ground water protection rules.

Lesen 98

Robert G. Adams
R. Rex Ausbum. P.E.
Nan Bunker
Leonard Fergusem
Dianne R. Nielson. Ph.D.
K.C. Shaw, P.E.
Ronald C. Sims. Ph.D.
J. Ann Weebsler
William R. Williams
Don A. Ostler, P.E.
Executive Scoretary



The numeric criteria in the UPDES permit are outfalls for point source discharges of wastewater to surface water which has come in contact with disturbed area of the mining operation. In addition, some of the criteria were derived by "Best Professional Judgement" as the basis for effluent limitations which have no correlation for use as a groundwater protection standards. They were simply concentrations that were determined to be capable of being achieved based on historical data and should not be used for decision making for

This is in response to the above referenced letter requesting our reconsideration on one of the conditions we prescribed for use of the Golden Gate Basin to be eligible for "Permit by Rule." This condition required that water disposed of in the basin not exceed the numeric concentrations of the Ground Water Quality Standards specified in Table 1 of UAC R317-6. You felt it would be more appropriate to use the levels specified in your UPDES permit. As per your request we have gone back and reviewed the conditions of our Dec. 12, 1997 letter in this context and conclude our original

2. While R317-6-6.B requires no facility may cause ground water to exceed the referenced standards (numeric criteria applied in the aquifer) unless the ambient quality already exceeds those levels, it does not preclude a discharge from the facility at a higher concentration and still be eligible for permit by rule provided it was stormwater in the classic sense. However, to make this determination for wastewater other than stormwater would require a deminimus impact to ground water be demonstrated.

Glenn M. Eurick, Director March 3, 1998 Page 2

Although, because of the above, we are not able to conclude the facility is permitted by rule as you requested, we suggest an alternative for your consideration. We suggest that water quality data be collected for the duration of your UPDES permit. Where the pit is currently considered an existing facility, you could continue to operate as you have in the past. Following closure and completion of revegetation, a reevaluation of the eligibility for permit by rule status would be conducted. At that time we would either conclude there exists sufficient basis of no potential impact or there would be ample basis for development of potential alternatives.

We hope the suggestion is agreeable to you. Please contact Larry Mize or Dennis Frederick if you desire further discussion of the issue.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E. Executive Secretary

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DAO:ljm/fb

cc:

Tooele Co. H.D.

Global Environmental Technologies, Inc.

Division of Oil, Gas, & Mining

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Michael O. Leavitt Dianne R. Nielson, Ph.D. Don A. Ostler, P.E. Director

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DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

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CC: C.L. Landa C. L. Olsen G. M. Eusick L. Boteilho P. Doyle

Water Quality Board Lercy H. Wullstein, Ph.D. Lynn F. Pett Vice Chairman Robert G. Adams R. Rex Ausburn, P.E. Nan Bunker Leonard Ferguson Dianne R. Nielson, Ph.D. K.C. Shaw, P.E. Ronald C. Sims, Ph.D. J. Ann Wechsler William R. Williams Don A. Ostler, P.E.

May 14, 1998

Mr. Dave Beatty Barrick Resources (USA) Inc. Barrick Mercur Gold Mine P.O. Box 838 Tooele, Utah 84074-0838

Subject:

Approval - Mercur Mine / Mine Site Reclamation - Area 3 DIV. OF OIL, GAS & MINING

Dear Mr. Beatty:

We have reviewed plans and specifications for reclamation of the heap leach pad(Area 3), prepared by Golder & Associates. We received this information on April 6, 1998.

This approval pertains to reclamation of the Area 3 heap leach pad only. The pad will be recontoured to a side slope of 3+ horizontal to 1 vertical and than covered with a 3 foot thick vegetative material. The Quality Control / Quality Assurance plan provides a depth verification for the topsoil on a 100 sq. ft. grid.

Based on our review, the proposed reclamation plan complies with Utah Water Quality Rules, (R317, Utah Administrative Code) and is hereby approved.

If we can be of further assistance, please contact me or Mr. Lyle Stott of my staff.

Sincerely,

Utah Water Quality Board

Don A. Ostler. P.E. **Executive Secretary**

LWS

Tooele County Health Department CC:

p:/wq/eng_wq/lstott/win/wp/barrick - reclamation area 3 FILE:Barrick

Water Quality Board

R. Rex Ausburn, P.E.

Ronald C. Stone, Ph.D. J. Ann Wechsler William R. Williams Don A. Ostier, P.E.

Dianne R. Nielson, Ph.D.

Lynn F. Pett Robert G. Adams

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contact Ferguson

K.C. Shaw, P.E.

Leroy H. Wallstoin, Ph.D.



State of Utah

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DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

288 North 1460 W Michael O. Leavitt P.O. Box 144870 Salt Lake City, Ut Diazne R. Nielson, Ph.D. (801) 538-6146 (801) 538-6016 Fi Don A. Ostler, P.E. (801) 536-4414 T. understate.ww

Post-it* Fax Note

April 14, 1998

David P. Beatty, Environmental Coordinator Barrick Resources (USA) Inc. P.O. Box 838 Tooele, Utah 84074

Subject:

Valley Fill Area No. 3; Permit No. UGW450001. Approval - Final Closure Plan [w/o

MAY 27 1998

DIV. OF OIL, GAS & MINING

Specifications]

Dear Mr. Beatty:

We have completed our review of the revised Final Closure Plan submitted December 23, 1997, for the Valley Fill Area #3 Leach Pad. In accordance with the Part LH.1 of the above referenced permit the Final Closure Plan is hereby approved. The following review comments summarize our understanding of the closure plan and how the plan will be implemented. When a ground water permit is reissued to cover the post closure period for the facility, the BAT requirements developed in the Final closure plan will be incorporated into the permit.

Comments:

- The neutralization procedure demonstrated that although biological treatment will not reduce contaminant concentrations as much as fresh water rinsing, it did reach concentrations which 1. are environmentally protective and cost effective. This strategy is augmented by natural precipitation and rest periods between rinsing cycles. Rinsing was discontinued October 1, 1997 when protective levels were reached and further rinsing was determined to not be effective in further reducing contaminant concentrations. The achieved BAT standard for this alternative is cyanide-WAD concentrations less than or equal to 0.2 mg/l. Reductions in concentrations of mercury, arsenic, selenium and thallium was also a positive attribute of the biological treatment
- The proposed dewatering will be managed until at least October, 2001. Approval to decommission the dewatering well will be based on data available at that time. Modelling 2. suggests that the long-term levels of residual fluids and meteoric infiltration impounding on the existing liner system will be less that the operational head levels in VFL3. Decommissioning of the infrastructure [cistern, upper and lower leakage collection systems and piping grouted, dismantling and removal of nonessential items reagent storage and related support systems] is scheduled for this summer. The date and volume of all water removed, utilizing the dewatering well, shall be recorded and reported quarterly.

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April 14, 1998 Page 2

- Cover placement is to consist of two distinct zones. 1) a three foot layer of subsoil, and 2) a one
 foot layer of top soil. Justification for this cover design is provided in the report "Infiltration
 and Solute Transport Analysis, August, 1996".
- 4. Post-Closure monitoring of ground water during the post-operational phase of VFL3 will be required by applicable permit conditions.

For authorization to construct, the Design and Evaluation Section of DWQ will need to review submitted specifications and drawings for this activity and will issue a letter for construction approval for the closure process.

Should you have any questions contact Keith Eagan at 538-5017.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E. Executive Secretary

DAO:kee/fb

cc: Tooele County Health Dept.

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